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ABSTRACT

Based on research indicating the existence of a generalized positive stereotype of physically attractive individuals, the present study was designed to investigate the effects of an individual's attractiveness on attributions about his achievement-related behavior. In the context of an accuracy-of-person perception task, 162 male and female subjects were shown a photograph of either a male or female physically attractive or unattractive stimulus person. Subjects were told that the stimulus person had either succeeded or failed on an examination, and were asked to attribute the stimulus person's success or failure to four attributional categories (i.e., task difficulty, luck, ability, and effort). The results indicated that physical attractiveness affected causal attributions, especially for those who were unattractive. Unattractive individuals were seen as having very high ability and expending much effort when successful, but very low ability and effort expended when they failed. This finding was especially pronounced for female, as compared to male subjects. A number of such sex-related findings are discussed as well as the implication of these findings for other attribution-type studies. (Author)

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THE EFFECTS OF PHYSICAL ATTRACTIVENESS ON ATTRIBUTIONS OF CAUSALITY FOR SUCCESS AND FAILURE*

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As Dion, Berscheid and Walster (1972) have noted, physical attractiveness is one of the most obvious and accessible personal characteristics. Much research has recently been focused on physical attractiveness (cf. Berscheid & Walster, 1974), and it seems to indicate that an individual's physical attractiveness is an important social cue evoking expectations about an individual's personality and behavior.

In one study that investigated how expectations of others are affected by an individual's attractiveness, Dion et al. showed subjects pictures of highly attractive and unattractive individuals. Subjects were then asked to evaluate each picture in terms of a series of personality and life success scales. The results indicated that attractive individuals were seen as being friendlier, more sensitive, more sincere, and more sociable, than unattractive individuals. Moreover, the physically attractive were expected to have more prestigeous occupations, to be more happily married, and to be more likely to have successful social and professional lives than the unattractive.

A number of recent investigations have also shown that physical attractiveness can affect specific expectations about behavior. For example, Clifford and Walster (1973) demonstrated the importance of physical attractiveness in influencing how a student's academic potential is interpreted. As part of a study to ostensibly

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determine the usefulness of student records, fifth grade teachers evaluated a student's academic file which included a photograph of either an attractive or unattractive child. Clifford and Walster's results showed that teachers perceived attractive children as being more intelligent, more likely to attain advanced education, and more likely to have parents who are concerned with academic achievement than unattractive children.

One implication of these two studies is that physical attractiveness affects the type of causal attributions (cf. Kelly, 1971) made about another's behavior. In essence, because the physically attractive are expected to be "better people" (e.g., possess better personalities), the causality for their behavior may be seen differently than for those who are physically unattractive. Data relevant to this point have been obtained in a study by Miller (1970b) who found that causality for the behavior of unattractive individuals was perceived to be more external than for attractive individuals.

Much work has recently been focused on understanding the types of attributions made when a person either succeeds or fails on a task, and it seems likely that physical attractiveness will affect interpretations of such behavioral outcomes. Weiner and his colleagues (e.g., Weiner, Frieze, Kulka, Reed, Rest, & Rosenbaum, 1971) have proposed that individuals allocate the causes of success and failure on achievement-oriented tasks to four elements: (a) the person's ability, (b) the amount of effort the person expended, (c) the difficulty of the task, and (d) the amount of luck the person had.

According to Weiner et al., these causal factors differ from one another along two dimensions. One dimension is the stability

of the causal elements over time. According to this differentiation, ability and task difficulty are stable because they are constant for each task, while effort and luck are highly unstable. A second dimension differentiates the causal elements in terms of internality/externality. Because ability and effort originate within the person they are internal causes, while task difficulty and luck originate outside the person and are thus external causes. The importance of distinguishing between these catagories is that they imply very different reactions to a person's behavior.

In addition to considering how attributions about achievement-oriented behavior are affected by an individual's level of physical attractiveness, it is also important to consider the interaction of these variables with the perceiver's sex and the sex of the stimulus person. A number of studies (e.g., Bar-Tal & Frieze, 1975; Feather, 1969; Simon & Feather, 1973) have demonstrated that males and females weight causes differentially. Women, for example, tend to rely more on external causes than do men. There have also been suggestions (e.g., Bar-Tal & Saxe, 1974; Miller, 1970a) that physical attractiveness is differentially important for how male and female stimulus persons are perceived and these investigators have found stronger physical effects for female stimulus persons than for male stimulus persons.

Given the evidence that physical attractiveness serves as an important social cue, the present study was designed to investigate how an individual's level of attractiveness affects attributions about his/her behavior. In addition, the study was designed to assess possible interactions between the perceiver's sex and the sex of a stimulus person as they affect attractiveness-mediated attributions.

Method

Subjects

Subjects were 162 male and female undergraduate students at the University of Pittsburgh.

Procedure

Subjects (in groups of about 35) entered a classroom and were given a set of experimental materials by a male experimenter. Included, was a set of instructions which was also read to the subjects by the experimenter. The instructions indicated that the purpose of the study was to investigate the process of person perception and that the experiment was designed to compare the person perception accuracy of untrained college students with that of a group of psychology graduate students and faculty. Subjects were asked to assume that they were meeting a person for the first time and that the only information they had about the person was that contained in their packet of experimental materials.

When subjects opened their experimental materials, they found a passport-size photograph of an individual and were asked to indicate their evaluation of that person by completing six Likert scales. The black and white photographs used were selected from a college yearbook and had previously been evaluated on the dimension of physical attractiveness by a group of eight judges (from the same population as the subjects). Using a procedure similar to Dion et al.'s (1972), two photographs of high and low attractiveness of each sex were selected from those rated by the judges.

After evaluating the stimulus person, subjects read a short situational description about the person in the photograph. It indicated that the individual had either succeeded or failed an

important exam. Based on this description, subjects were asked to indicate why they thought the stimulus person had succeeded or failed by dividing 100 points between Weiner's four attributional categories.

Results

Analyses of Evaluation Scales

A 2x2x2 analysis of variance (Sex of subject x Sex of stimulus x Attractiveness) was conducted on each of the six Likert scales. First, the results of the analyses indicated that the manipulation of attractiveness was successful and high attractive stimuli were perceived as such ($F=102.36$, $p < .001$). Main effects for attractiveness also indicated that attractive individuals were perceived as being more popular ($F=46.87$, $p < .001$),[1] as having more prestige ($F=11.24$, $p < .001$), but as less intelligent ($F=13.00$, $p < .001$) then those who were unattractive. (The mean ratings for each of the evaluation scales, by condition, are shown in Table 1.)

Insert Table 1 about here

An additional attractiveness finding was an interaction between Sex of subject and attractiveness ($F=6.81$, $p < .01$) which indicated that Female subjects perceived attractive stimulus persons as least trustworthy and unattractive stimulus persons as most trustworthy.

In addition to the attractiveness effects, there were also main effects on several scales for two other factors. A sex of subject main effect was obtained on the intelligence scale ($F=6.46$, $p < .05$) indicating that female subjects rated the stimulus person's intelligence significantly higher than did male subjects. There was also a

Sex of stimulus main effect on the prestige scale (F=4.67, $p < .05$) which indicated that male stimuli were judged as having more prestige than female stimuli.

Analyses of Causality Ratings

Analyses of variance were conducted on the number of points that subjects assigned to each of the four causal categories (luck, exam difficulty, ability, and motivation). Because the way in which points were distributed resulted in a non-normal distribution, all scores were transformed by an arcsin square root procedure (Winer, 1971). A 2x2x2x2 analysis of variance (Sex of subject x Sex of stimulus attractiveness x Outcome) was then conducted on transformed scores in each category. (The results from these analyses are summarized in Table 2.)

Insert Table 2 about here

The analyses of variance yielded a number of significant main effects. However, with one exception--on the Sex of subject factor--each of these effects was constrained by interactions. The simple main effect was on the motivation scores and indicated that female subjects tended to place less weight on motivation than did male subjects (M=23.31 vs. M=29.39).[2] (Mean ratings for each condition are shown in Table 3.)

Insert Table 3 about here

Several two-way interactions were obtained between Sex of subject and Outcome on causality ratings of exam difficulty ($p < .01$)

and ability ($p < .01$). The interactions indicated that female subjects in the failure conditions perceived the exam as more difficult than subjects in any of the other conditions (M=55.91), while female subjects in the success conditions perceived the exam as less difficult than other subjects (M=14.05). On ability ratings an interaction showed that female subjects perceived the stimulus persons as having the least ability (M=14.54) in the failure conditions and the most ability (M=49.24) in the success conditions.

Several important interactions involving Attractiveness of the stimulus person were also obtained. An interaction between Sex of stimulus and Attractiveness for luck ratings ($p < .05$). was found and indicated that attractive males were perceived as having the most luck (M=12.50), while unattractive males were perceived as having the least luck (M=8.33). In addition, there were significant interactions (Sex of stimulus x Attractiveness) on ratings of exam difficulty ($p < .05$) and ability ($p < .05$). These interactions indicated that the exam was perceived as least difficult for attractive females (M=27.15), while attractive females were also judged as having the highest ability (M=38.13). For unattractive females, the exam was perceived as more difficult (M=36.59) than for any other individuals and unattractive females were perceived as having the least ability (M=28.76).

There were also three significant Attractiveness by Outcome interactions on ratings of exam difficulty ($p < .01$), ability ($p < .05$), and motivation. The interactions indicated that when attractive individuals were successful, the exam was perceived as least difficult for them (M=13.12), they were judged as having the most ability (M=47.93), and they were seen as having the most

motivation (M=31.73). However, when unattractive individuals failed, the exam was perceived as more difficult for them than for other individuals (M=52.33), they were judged as having the least ability (M=15.00) and least motivation (M=20.87).

Three-way interactions (Sex of subject X Attractiveness X Outcome) were also obtained on ratings of exam difficulty ($p < .01$) and ability ($p < .05$). The interactions indicated that the previously described tendency to evaluate unattractive individuals very highly when they succeed (and very low when they fail) is especially pronounced for female subjects.

Discussion

The results of the present experiment indicate, first, that the positive stereotype of the physically attractive (cf. Dion et al., 1972; Miller, 1970a), does not exist under all conditions. While subjects clearly identified the physically attractive individuals as such, they did not uniformly rate the attractive individuals positively. Thus, on scales which assessed intelligence and trustworthiness, the unattractive were rated higher than the attractive.

A second set of results from the present study are perhaps more significant and indicate that physical attractiveness can serve as an important antecedent of causal attributions. Subjects, when asked to attribute the reason for a person's success or failure, appeared to be influenced by the individual's physical attractiveness. The way in which physical attractiveness operates to influence these perceptions is not at all simple, and our results indicated a number of interactions between not only physical attractiveness and task outcome, but also between physical attractiveness and both the subject's and stimulus person's sex.

In particular, outcome seems to have a profound effect on the way in which unattractive stimuli are perceived. When an unattractive person is successful, he or she is evaluated as having very high ability and motivation and as having an easy task; yet, when this unattractive individual fails, he or she is evaluated as having very low ability and motivation. These findings suggest that low physical attractiveness may serve as an inhibitory cause (Kelly, 1971) when unattractive individuals are successful, but when they fail it may become a facilitative cause. That is, when an unattractive person succeeds, their success is perceived as occuring in spite of their negative characteristics, and they are rated the highest on such scales as ability. However, when an unattractive person fails, the negative perception of them is merely reinforced.

Not surprisingly, one strong finding obtained in the present study was that males and females were judged differently on the basis of their physical attractiveness. Similar to Bar-Tal and Saxe's (1974) finding that a uniformly positive stereotype does not exist for attractive males, in the present study attractive males were perceived as having lower ability, and more luck than the unattractive. Our assumption is that both of these causal ascriptions imply negative evaluations. While the attractiveness literature (cf. Berscheid & Walster, 1974) has not focused on sex differences in the attractiveness stereotype, it is certainly reasonable to assume that such differences exist. Given the obvious differential emphasis in our culture on male and female beauty, it is only puzzling that these differences have not appeared elsewhere and it suggests an important area for further research.

One other important finding is that for female subjects the tendency to perceive outcome differentially according to the stimulus person's physical attractiveness is especially pronounced. For example, on ability scores, female subjects attributed more ability to successful unattractive individuals than did males, but they attributed less ability to an unattractive individual who failed. One explanation for this discrepancy between males and females is that females are socialized in our society to be more concerned with aesthetics and they probably weigh attractiveness more heavily in making inferences about other's behavior. Another possible explanation is that females, because their own attractiveness is used by others in evaluating them, are extremely sensitive to others' physical attractiveness. It would be interesting, in this regard, to examine the effect of the subject's own attractiveness upon his or her ratings of others.

In summary, the present results, while casting doubt on the unidimensional stereotype of physical attractiveness for both males and females, also have implications for research on attributional processes. If, in fact, physical attractiveness can serve as an important antecedent of attributions, one can expect differences in results between studies that have only presented behavioral descriptions, and studies that involve high and low levels of interaction.

References

Bar-Tal, D., & Frieze, I. H. Attributions of success and failure for males and females as actors and observers. Learning Research and Development Center, University of Pittsburgh, 1974. (Ms. No. 1975/8)

Bar-Tal, D., & Saxe, L. Effect of physical attractiveness on the perception of couples. Proceedings of the Division of Personality and Social Psychology of the American Psychological Association, 1974, 1, 30-32.

Berscheid, E., & Walster, E. Physical attractiveness. In L. Berkowitz (Ed.) Advances in experimental social psychology. Vol. 7. New York: Academic Press, 1974.

Clifford, M. M., & Walster, E. The effect of physical attractiveness on teacher expectation. Sociology of Education, 1973, 46, 248-258.

Dion, K. K., Berscheid, E., & Walster, E. What is beautiful is good. Journal of Personality and Social Psychology, 1972, 24, 285-290.

Feather, N. T. Attribution of responsibility and valence of success and failure in relation to initial confidence and perceived locus of control. Journal of Personality and Social Psychology, 1969, 13, 129-144.

Kelley, H. H. Attribution in social interaction. New York: General Learning Press, 1971.

Miller, A. G. Role of physical attractiveness in impression formation. Psychonomic Science, 1970, 19, 241-243. (a)

Miller, A. G. Social perception of internal-external control. Perceptual and Motor Skills, 1970, 30, 103-109. (b)

Simon, J. G., & Feather, N. T. Causal attributions for success and failure at university examinations. Journal of Educational Psychology, 1973, 64, 46-56.

Weiner, B., Frieze, I., Kukla, A., Reed, I., Rest, S. A., & Rosenbaum, R. M. Perceiving the causes of success and failure. New York: General Learning Press, 1971.

Winer, B. J. Statistical principles in experimental design (2nd Ed.). New York: McGraw-Hill, 1971.

Footnotes

1. Degrees of freedom are 1/154 for all tests on the evaluation scales.

2. All means reported are based on the actual, untransformed scores.

Table 1

Mean Ratings on Evaluative Scales

Evaluative Scales	Male Subjects				Female Subjects			
	Male Stimulus Person		Female Stimulus Person		Male Stimulus Person		Female Stimulus Person	
	Attractive	Unattractive	Attractive	Unattractive	Attractive	Unattractive	Attractive	Unattractive
Likeable	4.71	4.44	4.81	4.45	4.48	4.38	4.32	4.23
Trustworthy	4.38	5.08	4.52	5.30	3.67	5.72	4.16	5.94
Intelligent	4.71	5.60	5.00	5.55	5.24	5.94	5.53	6.00
Popular	5.00	3.28	4.90	3.80	4.86	3.44	4.84	3.35
Prestigeous	4.86	4.08	4.57	3.65	4.71	4.28	4.31	3.47
Attractive	5.09	2.92	4.67	2.35	4.76	2.33	4.37	2.65

Note.--On the above scales, ratings ranged from (1) not at all to (7) very much.

Table 3

Mean Rating Scores

Dependent Variables	Male Subjects								Female Subjects							
	Male Stimulus Person				Female Stimulus Person				Male Stimulus Person				Female Stimulus Person			
	Attractive		Unattractive		Attractive		Unattractive		Attractive		Unattractive		Attractive		Unattractive	
	Success (9)	Failure (12)	Success (14)	Failure (11)	Success (9)	Failure (12)	Success (11)	Failure (9)	Success (13)	Failure (8)	Success (9)	Failure (9)	Success (11)	Failure (8)	Success (7)	Failure (10)
Luck	11.22	15.00	5.07	11.18	10.22	8.33	9.82	13.44	13.69	8.87	8.67	10.67	8.72	10.87	6.57	12.50
Exam Difficulty	16.22	39.17	14.21	36.82	12.78	41.17	16.64	44.00	18.54	50.63	9.89	59.44	15.00	39.00	10.00	70.50
Ability	36.67	20.00	49.64	23.27	52.22	23.08	38.18	17.78	41.92	17.00	50.56	9.22	52.27	25.38	56.43	9.30
Motivation	35.00	25.83	31.43	29.09	25.00	27.75	35.36	25.00	26.92	23.75	31.33	21.00	24.09	24.88	27.14	8.30

Note.--Ns for each condition are shown in parentheses.

Table 2

Analyses of Variance on Points Assigned to Attributional Categories

Source of Variance	df	F Values			
		Luck	Exam Difficulty	Ability	Motivation
Sex of Subject (A)	1,146	.07	5.35*	.20	8.16**
Sex of Stimulus Person (B)	1,146	.07	.15	1.80	2.94
Level of Attractiveness (C)	1,146	.60	1.35	1.32	.29
Outcome (D)	1,146	2.81	198.41***	141.73***	9.98**
A x B	1,146	.02	.24	.97	.63
A x C	1,146	.02	.55	.50	2.04
A x D	1,146	.03	9.98**	6.92**	1.19
B x C	1,146	4.38*	4.17*	4.99*	.39
B x D	1,146	.00	.11	.17	.15
C x D	1,146	3.07	8.32**	5.00*	4.99*
A x B x C	1,146	2.43	.64	1.09	1.89
A x B x D	1,146	3.07	.07	.01	.45
A x C x D	1,146	.17	9.27**	3.62*	1.51
B x C x D	1,146	.01	.71	.29	3.34
A x B x C x D	1,146	.14	.71	.99	.11

Note.--Points were transformed by an arcsin square root procedure before analysis.

***$p < .001$
**$p < .01$
*$p < .05$